# The Software Technology Support Center Reengineering and Year 2000 Services

# **Essential Process Improvement**

The Software Technology Support Center (STSC) Reengineering and Year 2000 (Y2K) staff has introduced the concept of "Essential Process Improvement" to focus on surviving the Y2K challenge.

# Beating the Year 2000 Event Horizon

Your application's event horizon (or expected failure date due to problems with processing date values close to the year 2000) is fast approaching. You may only be able to improve those processes that are absolutely essential to the success of your Y2K upgrades. Other process improvement initiatives may need to be postponed. You may be dealing with poorly documented legacy systems that were built with less than the best practices. The time is limited to redevelop a Y2K-compliant system using improved development methods and tools. What should you do?

# Corporate and Project Year 2000 Compliance Guidebooks

Our approach to help organizations conduct each phase of their Y2K compliance project is based on industry best practices and our experience with Y2K upgrades. Corporate or director-level issues that require high-level planning and support need to be identified. Specific project-level issues also need to be addressed. We help an organization tailor our STSC Corporate Y2K Compliance Guidebook and our STSC Y2K Project Guidebook for their project. These guidebooks work in harmony with the Air Force Communications Agency's guidelines and checklists such as the Y2K Concept of Operations and the Air Force Y2K Compliance Checklist.

STSC's guidebooks provide a checklist of activities accompanied by supporting rationale to explain the purpose of each activity. As each activity is accomplished, a date is entered, giving management their Y2K project history. Augmented with lessons learned, these project histories will support future maintenance efforts and potential litigation that may arise due to unforeseen Y2K noncompliance.

# **Summary of Services**

The STSC reengineering and Y2K staff provides on-site consulting services on a cost-recovery basis. These services address all phases to upgrade systems to Y2K compliance, including

#### **Awareness**

- Y2K management briefings and tutorials.
- Test, inspection, and Y2K workshops and seminars.

- Y2K vulnerability assessments.
- Automation support (evaluate, select, and adopt).
- Y2K strategic planning and project management.

#### Assessment

- Systems, interfaces, and documentation inventories.
- Y2K system project plans (develop and review).
- Risk analysis and contingency planning.
- Code Y2K impact analysis (manual and tool assisted).
- Initial date-function tests of vendor-supplied software.

#### Renovation

- Code correction (manual and tool assisted).
- Code inspections and unit testing.
- Code correction progress tracking.

#### Validation

- Test plans and test procedures (prepare and inspect).
- Test execution (manual and tool assisted).
- Test progress tracking.

## **Implementation**

- Operational test, evaluation, and certification.
- Coordinating production system implementation.
- Update project documentation and collect historical data. We also have a number of resources that the STSC can provide to organizations to support their Y2K efforts, including
- Top management and project-specific Y2K guidebooks.
- Preliminary analysis of Y2K planning documents or test plans.
- Y2K team augmentation (assistance) services.
- · Project planning.
- Source code analysis.
- Source code renovation.
- · System testing.
- Certification and compliance.
- Customized tool lists from one of the industry's largest Y2K tool databases.
- Guidance in tool evaluation, selection, and adoption.

### **Points of Contact**

For more information, please contact the Y2K team.

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